

zealous cooperator with Mr. Layard. It bears the same relation to *D. pallida*, Smith (Ill. Zool. S. Afr. pl. 72. fig. 2) that *Phyllopneuste trochilus* does to *P. bonellii*—an analogy which seems to be found in the whole of the Sylviad group, there being usually a brown and a representative yellow species. The tarsi are *one-third* shorter than in *D. pallida*.

XIX.—*Remarks on Dr. Stoliczka's "Ornithological Observations in the Sutlej Valley."* By ARTHUR VISCOUNT WALDEN, P.Z.S. &c.

IN the 'Journal of the Asiatic Society of Bengal' for 1868, a paper has been published, entitled "*Ornithological Observations in the Sutlej Valley, N.W. Himalayas,*" which deserves the attention and the study of the philosophical ornithologist. The author, Dr. Stoliczka, is a gentleman whose name is well known as that of a distinguished palæontologist and geologist. And this, I believe, his first ornithological contribution possesses merits more than sufficient to entitle him to a high place among scientific ornithologists. The accession to our ranks of of a recruit already so eminent in other branches of the natural sciences will be hailed with pleasure, and, by those who aim at higher objects than the mere priority of naming their species, with gratitude. The addition of another labourer in the but partially tilled field of Asiatic zoology will be welcome to the few, though happily increasing, workers in that much-neglected region of the earth's surface; while a perusal of Dr. Stoliczka's paper will show that it is possible for a naturalist primarily and chiefly occupied with a widely differing branch of research, to combine a record of practical zoological observations made in the field with an almost rigid accuracy of nomenclature.

An account of the collections made by Dr. Stoliczka, of which a translation appeared in this Journal for July last*, will already have enabled its readers to estimate his activity in the good cause. The collection there noticed was a general one of birds obtained in Tibet as well as in the Himalayas. The list I now propose noticing is confined to the species which inhabit a

* Ibis, 1868, pp. 302-321.

limited region of those mountains, the Sutlej Valley, and is therefore more local in its character. The species were collected or observed during the summer months, from May to October; while the authority for the winter residence of many of them rests chiefly on the evidence of the specimens obtained by *shikarees* employed to collect during the winter.

One hundred and thirty-nine genera, belonging to the *Insesores*, are enumerated as being represented in the Sutlej Valley. Of the remaining eighty-nine genera, after deducting fifty which are common to the temperate regions of the Old World and to the plains of Continental India (such as *Hirundo*, *Coracias*, *Meropis*, *Picus*, *Corvus*, *Sitta*, *Lanius*, and so forth), forty-one of the genera (like *Palaornis*, *Pyctorhis*, *Tchitrea*, *Megalæma*, *Arachnechthra*, *Copsychus*, *Thamnobia*, *Dendrocitta*, *Zosterops*, and others) are strictly characteristic of the plains of India with their lower elevations. Seventeen genera are common to the mountains and elevated tablelands of the Himalayas, to Europe, to Central, and probably Northern, Asia—*Certhia*, *Cinclus*, and *Tichodroma*, for instance; seven are Himalayan genera, including, in all likelihood, Central-Asiatic species, *Hemichelidon*, *Propasser*, and a few more; and twenty-four are genera peculiar, within the Indian region, to the slopes, valleys, and jungles of the Himalaya. In the Central and Eastern Himalayan regions special genera, containing numerous species, abound; while in the north-western Himalayas these characteristic genera and specific forms rapidly diminish, and probably cease altogether before the eastern bank of the Indus is reached.

In his instructive preliminary sketch of the physical construction of the Sutlej Valley, Dr. Stoliczka supplies us with a ready explanation of this apparently anomalous commingling of the avi-fauna of such different zoological provinces. The Sutlej, without making a long eastern or western circuit, like the Bramapootra and the Indus, breaks, in an almost direct line towards the plains, through the intervening ranges of gigantic mountains, cutting its way, or bursting a passage, through the solid rock, and jumping, in a course of 180, or in a straight line of 110 miles, from an altitude of 13,000 to that of 1000 feet. Its valley and those of its affluents thus provide an easy means of

access from the plains to the elevated tablelands north of the Himalayas, and become a direct highway for birds migrating from the north or the south of those mountains : and although, in historical times at least, neither the nations north nor south of the Himalayan barrier have ever availed themselves of these natural advantages, either for warlike or commercial purposes, Dr. Stoliczka almost implies that the most feasible route to or from Central Asia is to be met with by following the course of the Sutlej. The country of the plains extends to within the mouth of the valley ; and there are still to be found the animals indigenous to the low country. Higher up, but yet in the lower portions of the valley, to an elevation of from 4000 to 5000 feet, many low-country species of birds find those conditions of food and climate which become suspended in the plains during the great heat and drought of summer, and the means of forming their nests and rearing their young. And there also a few Central-Himalayan hill-forms occur, but diminished in variety and number of species, having almost reached their western geographical limit through the action and effects of an increased latitude ; while, as the valley continues rising to its greatest elevation, the species and genera of the Central-Asiatic fauna begin to appear, increasing in number until, when the summit is gained, they almost exclusively predominate.

In short, this valley has its beginning in the Tibetan zoological province, and its termination in the Indian ; is a highway for birds which pass the summer in central or northern Asia and the winter in India ; is alternately a refuge for those Tibetan birds which cannot endure the rigour of a Tibetan winter, and for those Indian species which are unable to support the great heats of summer ; and is the permanent habitation of the declining Eastern-Himalayan hill-forms, and of those species which are characteristic of a temperate yet unelevated region in the higher latitudes of the Old World, like *Loxia*, *Pyrrhula*, *Carduelis*, and *Garrulus*, and help to connect the avifauna of Europe with that of Hindustan. The meeting together in the Catalogue of the Ornis of a single valley of such zoo-geographical extremes as *Lerwa nivicola*, and *Temenuchus pagodarum*, *Carduelis caniceps* and *Arachnothera magna*, *Monti-*

fringilla adamsi and *Xantholæma indica*, is thus accounted for.

Of the two hundred and eighty species collected or observed by Dr. Stoliczka, there are described as new, *Linota pygmæa*, *Fringilla sordida*, and *Munia similaris*. The first two appear to have been hitherto undescribed; but the third is undoubtedly *Munia undulata* (Lath.)* in first plumage. Three species, belonging to the genera *Phylloscopus*, *Allotrius*, and *Hydrobata* are noted as undetermined. From description alone, it is difficult to identify some of the small Warblers; and the species described may possibly be new. It is said to resemble *Phylloscopus rama* (Sykes), but to be decidedly smaller. So many Asiatic species have already been described closely resembling Col. Sykes's bird that Dr. Stoliczka has exercised a laudable caution in not adding another. The *Allotrius* our author considers to be the *Pteruthius xanthochlorus* of Hodgson (J. A. S. B. 1847, p. 448), hitherto regarded as the female

* The synonymy of this genus is in some confusion. Three original descriptions of a *spotted Munia* were published previously to 1766,—one by Albin, with a coloured plate (1738), from a bird said to have come from China, one by Edwards (1743), with a coloured plate, said to be from the East Indies, where it is called *Cowry bird*, and one by Brisson (1760), from a specimen obtained near Batavia, in Java. Linnæus (S. N. i. p. 302) quotes Edwards first, and then Brisson, omitting Albin. If the first reference is to be taken as having supplied the type, the Indian bird must stand as *M. punctularia* (L.); if the second, the Linnæan title must be applied to the Javan bird, *Fringilla nisoria*, Temm. Jerdon's *White-backed Munia* (B. Ind. iii. p. 356) is clearly not *Loxia striata*, L., founded on Brisson's "Gros-bec de l'Isle de Bourbon" (Orn. iii. p. 243), which has the entire upper surface uniform. If not indigenous to that island, Brisson's type probably came from Java, where a species exists fully answering to his description (*M. leucogastroides*, Moore, Cat. E. I. Co. Mus. ii. p. 510). The Indian bird must stand as *M. leuconota* (Temm. Pl. Col., Livr. 84, May 8, 1830, descr. orig. ex Bengal). The propriety of applying the Linnæan title of *L. malacca*, founded on Brisson's "Gros-bec de Java" (Orn. iii. p. 237), to Jerdon's *Black-headed Munia* (B. Ind. ii. p. 352), depends upon the identity of the Indian with the bird of Java, whence Brisson's type came. Linnæus included two distinct species under this title. *M. kelaarti*, Blyth, from Ceylon, first described by Mr. Blyth, with a doubt, as *M. pectoralis*, Jerd. (J. A. S. B. 1851, p. 178), is, I strongly suspect, the same as *Ploceneus fringilloides*, Lafresn. (Mag. de Zool. 1 ser. tab. 48, December 1835), ex Ceylon.

of *P. melanotis*, Hodgs. (*l. c.*), which, again, is erroneously identified by Dr. Jerdon (B. Ind. ii. p. 246) with *Allotrius ænobarbus*, Temm., of Java. The female of this conjectured female of another species is described for the first time by Dr. Stoliczka; and if we are to accept his conclusions, *Pteruthius xanthochlorus*, Hodgs., must resume its rank as a second Indian species of *Allotrius*. The plumage, as described, of the doubtful *Hydrobata*, notwithstanding the absence of a perfectly white throat and breast, seems to indicate that of a young *Cinclus asiaticus*, Sw. In one of the earlier stages of plumage of this species, the underside is clothed with smoky-brown feathers, each of which is edged with a dusky-grey fringe. In those of the flanks and upper surface the fringe is fulvous, occasionally mixed with dusky-grey. The secondaries are edged with white, those nearest the body being completely surrounded with a white margin. The primaries and some of the rectrices are slightly tipped with white. The tarsus, feet, and claws in the dried skin are dirty yellow, whereas in the adult bird they are brown. The pale fringing of the body-feathers gives the plumage a scale-like or spotted aspect. In another stage, probably that of an older bird, the edgings of the ventral regions and lower breast only are dusky white, all the rest being fulvous, while the wing-feathers are less boldly margined with white, and the tarsus and feet are darker. In a third stage still more nearly approaching that of the adult garb, the whole of the plumage is coloured as in fully adult birds, save that of the chin and throat, in which the dusky-white fringe occupies nearly the whole of each feather. On the upper breast a few feathers here and there are tipped with dusky white, making it appear spotted; and although the primaries are uniform brown, the secondaries still retain the narrow white margin. The legs are almost as dark as in the adult. Under and above each eye is a white mark; and this is to be found, though less prominently, in birds which are otherwise in completely adult plumage. The bill appears to acquire increased dimensions in this species, even after the plumage has reached its perfect stage. Two birds are introduced as new to the fauna of the Indian region as limited by Dr. Jerdon, *Tetraogallus tibetanus*, Gould, and *Alau-*

dula pispoletta (Pall.)*. But the following three species, noticed by Dr. Stoliczka, must be added:—*Linota brevirostris*, Gould, admitted, with some doubt, as distinct from *L. montium*, (Gm.), by our author and Herr von Pelzeln (Ibis, 1868, p. 319); *Montifringilla adamsi*, Moore; and *M. hæmatopygia*, Gould. All three visit the valley of the Sutlej during the winter, and, together with *Allotrius xanthochlorus*, increase the list of Indian species by six. *Emberiza stracheyi*, Moore, however, is considered identical with *E. cia*, L.; and thus the Indian list is reduced by one; while *Corvus tibetanus*, Hodgs., is regarded as scarcely separable from *C. corax*, L.; *Fregilus himalayanus*, Gould, as not distinct from the European Chough, and *Regulus himalayensis*, Blyth, upon Herr von Pelzeln's authority, as identical with *R. cristatus*. A hitherto somewhat dubious species, *Petrocincla castaneocollis*, Less. (Rev. Zool. June 1840, p. 160), was rediscovered by Dr. Stoliczka in West Tibet, north of Dras, and is expected by him to be found residing in the Punjab during the winter. He identifies it with *P. saxatilis* (L.). It is remarkable that *Lanius cristatus*, L., is not included in the list of the Sutlej-Valley birds. The only Rufous-tailed Shrike procured is identified as *L. arenarius*, Blyth, and was but once met with east of

* Zoog. Rosso-Asiatica, i. p. 526. It was observed by Pallas in southern Russia, and especially in the Caspian desert. He considered it to be the same as the bird named *Alauda spinoletta* by Linnæus (S. N. i. p. 288), from Italy. The Linnæan name Pallas altered to *pispoletta*, because Cetti (Ucc. di Sardegna, p. 159) stated that *pispoletta*, and not *spinoletta*, was the true Florentine name for the Italian bird, adding that the great Swede had never even seen it. *A. spinoletta*, L., is made equal to *Anthus aquaticus*, Bechst., by Bonaparte (Consp. Av. i. p. 247). Eversmann (Add. ad Zoog. Ross-As. p. 16, 1835) refers *Alauda pispoletta*, Pall., also to *Anthus aquaticus*. Bonaparte, on the other hand, regarded it as a distinct species of *Alauda*, and referred *Alandula raytal* (Buch.-Ham.) to it as a synonym. Dr. Stoliczka notes the differences whereby *A. pispoletta* is distinguished from *A. raytal*; and if the learned doctor's identification is correct, the discovery of Pallas's bird so far to the eastward is interesting. The specific title is unfortunate, founded, as it is, on the Florentine trivial name of a totally distinct species. Ménétrés (Cat. Raison. Caucas. p. 39) mentions that *A. pispoletta* is very common in the desert-plains on the shores of the Caspian during the months of April, May, and June. Later in the year he saw no more of it.

Chini. In the summer it is said to be more common in Tibet. Hodgson's name *Budytes citreoloides* is adopted for the *Yellow-headed Wagtail*, upon the authority, apparently, of Mr. Blyth, as quoted by Dr. Jerdon (B. Ind. iii. p. 873). Wherein Hodgson's species differs from that of Pallas, I have failed to discover. Indian examples agree in every respect with the description given by Pallas (Reise, 1776, iii. App. p. 696, no. 14) of his type specimen, which was obtained on the 26th of April (O. S.) in Siberia, and consequently had not assumed the full breeding-plumage. Pallas remarks that the same species is to be seen in Russia in spring, at the time when birds are migrating northwards. Dr. Stoliczka has omitted to describe the plumage of his specimens and the exact period of the year he met with them. The bird to which Hodgson gave the names of *Budytes calcaratus* and *B. citreoloides* is rarely found, in India, in full black and yellow breeding-plumage; and although some individuals may breed in the southern valleys of the Himalayas, yet, from the scarcity of examples in breeding-livery, we may infer that the greater part migrate in the spring further north. Any how, nothing less than a comparison made between a series of Siberian and Indian birds can determine the question; and even if the Indian bird proves to be distinct from *B. citreola* (Pall.), it will have to bear the title of *calcaratus*, Hodgs. (1836), which has a priority of eight years over that of *citreoloides**, Hodgs. *Parus cinereus*, Vieill., was observed as far north as West Tibet. Consequently, if we are justified in considering Javan, Cingalese, Western-Indian, Nipalese, Central-Indian, and Afghan individuals as belonging to one species, the range of this Titmouse is

* Fortunately Pallas's bird escapes having to take the specific title of *sheltobriuschka*, Lepechin (*Iter*, ii. p. 187, tab. 8. f. 1, 1775—a work published one year previously to Pallas's travels), which is given as a synonym by Gmelin, Latham, Blyth, and Horsfield and Moore. Lepechin calls his species *Der Bachstelze mit dem gelben Bauche*, and adds the name above quoted as being that by which this bird is known in Russia. Gmelin (S. N. i. p. 962) latinized the Russian word without adopting it, and hence the origin of the synonym. In the 'Zoographia' Pallas altered his title to *Motacilla citrinella*; and Lesson described the species (*Traité*, p. 422, 1831) under the title of *M. aureocapilla*. By both these authors the winter plumage alone is described.

very extensive. But, judging from a comparison of specimens, the Javan, the Cingalese, and the race inhabiting north-western India are severally distinct. And whether we regard them merely as varieties, or refuse to rank them as separate species, it would be inaccurate to assert that a form identical with *P. cinereus*, from Java, also inhabits Tibet.

With these remarks I will now close this somewhat hasty sketch of the results of Dr. Stoliczka's researches, with a hope that it will not be long before he will find himself able to publish further observations on the ornithology of the Himalaya mountains, and the regions they separate from north-western India.

XX.—Notices of Recent Ornithological Publications.

1. ENGLISH.

OUR anticipations with regard to Mr. Sharpe's work*, the first part of which we noticed some six months ago (*Ibis*, 1868, pp. 472, 473), have been more than realized by the two parts which have since appeared. The author is unsparing of his labour; and the draughtsman, of whose skill our present number will enable the reader to judge, is very successful in his vocation. Each part contains six plates, representing as many species of the group, with accompanying letterpress, wherein is embodied all that seems to be known respecting the birds. One of the species which requires especial notice is *Cittura sanghirensis*, first described by the author in the Zoological Proceedings for 1868 (p. 271), and no doubt sufficiently distinct from *C. cyanotis*, a very rare bird in collections, and apparently limited in its range to the northern part of the island of Celebes, while the allied form seems to be confined to the much smaller and more distant island of Sanghir, whence its name. We must congratulate Mr. Sharpe on having at last been able to settle the doubt which has long existed as to what the *Alcedo tridactyla* of Pallas really was—a happy result, obtained, however, only at the expense

* A Monograph of the *Alcedinidæ* or Kingfishers, by R. B. SHARPE. The plates drawn and lithographed by Mr. J. G. KEULEMANS. Part ii, October 1st, 1868; Part iii, January 1st, 1869. London: roy. 8vo.